




# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,165	01/18/2002	Katsuhiko Fukasaku	NE253-US	7604
7590	08/13/2004		EXAMINER	
McGinn & Gibb, PLLC 8321 Old Courthouse Road, Suite 200 Vienna, VA 22182-3817			IM, JUNGHWA M	
			ART UNIT	PAPER NUMBER
			2811	
DATE MAILED: 08/13/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b>	<b>Application No.</b> 10/050,165	<b>Applicant(s)</b> FUKASAKU, KATSUHIKO	
	<b>Examiner</b> Junghwa M. Im	<b>Art Unit</b> 2811	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

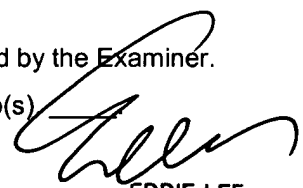
Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1-3, 7-8 and 11-23.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

  
**EDDIE LEE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**

Continuation of 2. NOTE: Newly added claim 24 raises new issues and would require further consideration and/or search..

Continuation of 5. does NOT place the application in condition for allowance because: the rejection ground(s) for the final action is maintained. (1) Fig. 1E of Chien clearly shows a memory device/ I/O region (110) having a thicker gate (112) with a deeper LDD (116) while a logic device/core region with a thinner gate (124) and a shallow a LDD (132). Furthermore, it is well known in the art that an I/O region requires a deeper LDD to accommodate a higher operational voltage needed for the I/O region. For example, see US Pat. 6117737 to Wang et al. (2) The instant claim recites "said lightly doped drain regions have depths corresponding to said thickness values of said gate electrode and said gate insulator film." This limitation can be read that the depth of the LDD region can have any relationship with the thickness of the gate electrode and the gate insulator. That is, this limitation does not exclusively indicate a relationship of "a thicker the gate, deeper the LDD." (3) The pending claims recites a intermediate structure shown in Fig. 3(J). A final structure in Fig. 3 (L) shows that the depths of the LDD region in the I/O and the core are the same. That is, Fig. 3(J) does not show "said lightly doped drain regions have depths corresponding to said thickness values of said gate electrode and said gate insulator film."